APPLICATION

FOR

UNITED STATES LETTERS PATENT

TITLE: ORTHOGONAL FREQUENCY DIVISION MULTIPLEXING RECEIVER DEVICE

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ORTHOGONAL FREQUENCY DIVISION MULTIPLEXING RECEIVER DEVICE

CROSS REFERENCE TO RELATED APPLICATION

This application is based on and incorporates herein

5   by reference Japanese Patent Application No. 2000-46799 filed

February 18, 2000.

BACKGROUND OF THE INVENTION

The present invention relates to an orthogonal

frequency division multiplexing (OFDM) receiver device in

10   communication systems utilizing an orthogonal frequency division

multiplexing system.

Recent communication systems are required to transmit

large capacity data such as video information or the like as the

digital value not only with wire transmission system but also

15   with radio transmission system. In this case, it is essential

to introduce not only the Phase Shift Keying system to modulate

the phase with the information by utilizing difference of phase

such as BPSK and QPSK or the like but also the Quadrature Amplitude

Modulation system to modulate the phase and amplitude with the

20   information by utilizing differences of phase and amplitude such

as 16QAM and 64QAM or the like. The signal modulated with the

QAM method such as 16QAM and 64QAM is transmitted from a

transmitter. The transmitted signals is then received by a

receiver device through the transmission path, and demodulated

25   to the original data through the synchronous detection.

In this case, when the wired transmission path is used,

any problem does not occur. However, when the radio or wireless